IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1   1-29.   (Canceled)

1   1-52.   (Canceled)

1   53.   (Currently Amended) A printer configured for rendering data an XML

2 document according to a formatting template ~~for printing an XML document~~, the formatting

3 template comprising an XML Descriptor (XMD) associated with an XML data element of

4 the XML document, wherein the XMD is identified by an associated qualified tag having a

5 concatenation of a plurality of XML start tags representing start tags hierarchically traversed

6 in the XML document to reach the XML data element, the XMD providing formatting to

7 content associated with the XML data element; the printer further configured for printing the

8 rendered XML document according to the template.

1   54.   (Currently Amended) The ~~formatting template~~ printer of claim 53, wherein

2 the data map comprises a chain of XML descriptors for formatting attributes if XML

3 elements.

1   55.   (Currently Amended) The ~~formatting template~~ printer of claim 53, wherein an

2 XML descriptor that does not have a matching qualified tag is skipped and a next XML

3 descriptor matching a start tag is used in formatting the XML data.

1   56.   (Previously Presented)   A printing system, comprising:

2   a spooler for receiving printable information from the print channel;

3   a print services facility for parsing an XML file; and

4   a printer for printing the print steam according to the formatting defined by the

5   formatting template;

6   wherein the formatting template includes an XML Descriptor (XMD)

7   associated with an XML data element of the XML document, wherein the XMD is identified

8   by an associated qualified tag having a concatenation of a plurality of XML start tags

9   representing start tags hierarchically traversed in the XML document to reach the XML data

10   element, the XMD providing formatting to content associated with the XML data element.

1   57.   (Previously Presented)   The formatting template of claim 56, wherein

2   the data map comprises a chain of XML descriptors for formatting attributes if XML

3   elements.

1   58.   (Previously Presented)   The formatting template of claim 56, wherein

2   the parser skips an XML descriptor that does not have a matching qualified tag and uses a

3   next XML descriptor having a matching start tag to format the XML data.

1   59.   (Previously Presented)   The formatting template of claim 56 further

2   comprising a buffer for storing start tags in order as the XML file is parsed.

1   60.   (Previously Presented)   A method for printing XML documents directly

2   using a formatting template, comprising:

3   placing an XML document to be printed on a server spool;

4   parsing the XML document to identify start tags hierarchically traversed in the XML

5   document to reach an XML data element;

6   searching a data map comprising XML descriptors identified by an associated

7   qualified tag having a concatenation of a plurality of XML start tags until a qualified tag

8   associated with an XML descriptor matches the identified start tags hierarchically traversed

9   in the XML document to reach the XML data element;

10   formatting the XML data element according the XML descriptor associated with the

11   qualified tag having a concatenation of a plurality of XML start tags matching the identified

12   start tags hierarchically traversed in the XML document to reach the XML data element;

13   merging the XML element associated with the XML descriptor associated with the

14   qualified tag having a concatenation of a plurality of XML start tags matching the identified

15   start tags hierarchically traversed in the XML document to reach the XML data element to

16   produce a formatted print data stream; and

17   printing a document using the produced formatted print data stream.

1   61.   (Previously Presented)   The method of claim 60 further comprising

2   skipping an XML descriptor that does not have a matching qualified tag and using a next

3   XML descriptor matching a start tag to format the XML data.

1   62.   (Previously Presented)   An article of manufacture comprising a program

2   storage medium readable by a computer, the medium tangibly embodying one or more

3 programs of instructions executable by the computer to perform a method for printing XML

4 files directly using a formatting template, the method comprising:

5   placing an XML document to be printed on a server spool;

6   parsing the XML document to identify start tags hierarchically traversed in the XML

7 document to reach an XML data element;

8   searching a data map comprising XML descriptors identified by an associated

9 qualified tag having a concatenation of a plurality of XML start tags until a qualified tag

10 associated with an XML descriptor matches the identified start tags hierarchically traversed

11 in the XML document to reach the XML data element;

12   formatting the XML data element according the XML descriptor associated with the

13 qualified tag having a concatenation of a plurality of XML start tags matching the identified

14 start tags hierarchically traversed in the XML document to reach the XML data element;

15   merging the XML element associated with the XML descriptor associated with the

16 qualified tag having a concatenation of a plurality of XML start tags matching the identified

17 start tags hierarchically traversed in the XML document to reach the XML data element to

18 produce a formatted print data stream; and

19   printing a document using the produced formatted print data stream.

1   63.   (Previously Presented)   The article of manufacture of claim 41 further

2 comprising skipping an XML descriptor that does not have a matching qualified tag and

3 using a next XML descriptor matching a start tag to format the XML data.